



Satellite TV

T2 Automation User Guide

v.3



MotoSAT

LM-05.18.05

Caution!



This unit must have proper ventilation. Failure to provide for it will cause premature failure and result in voiding of warranty.

OPERATIONS MANUAL

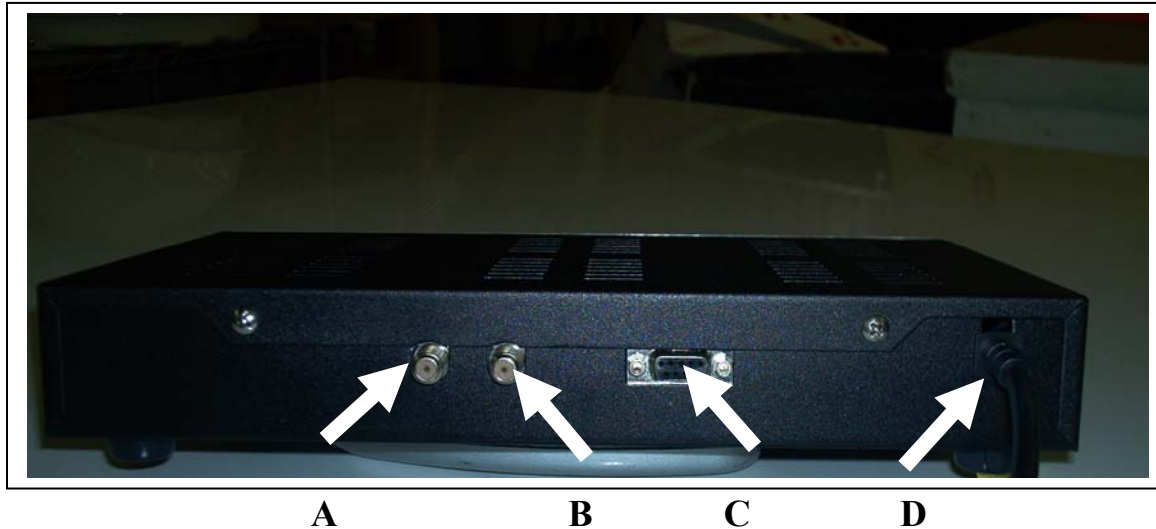
T2 AutoMotion Dome

Table of Contents:

Operating the T2 AutoMotion.....	4
Connection Definitions.....	4
Operation.....	4
Satellite Identifiers.....	5
Front Panel Status LEDS.....	6
(Search).....	6
(Tracking).....	6
(Sleep).....	6
Satellite Select Button.....	6
Technical Support.....	7
Specifications.....	8
Rain Fade Effects on a Dome System.....	9

Operating the T2 AutoMotion Dome

- 1- Plug in all necessary cable connections to the back of the T2 AUTOMOTION.
(See Figure Below)



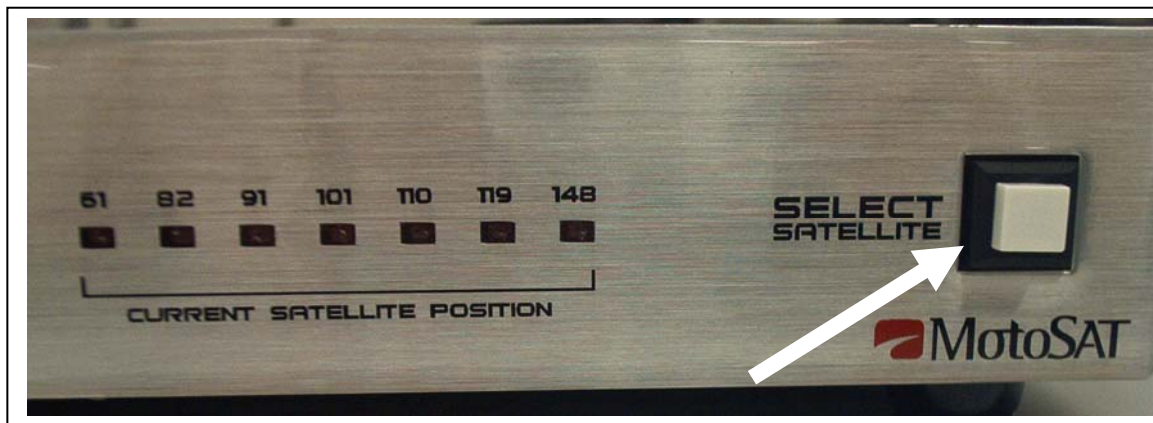
Connection Definition:

- A. Out to Receiver (Receiver) - Used to connect the T2 AutoMotion to the satellite receiver.
- B. In from the Dish (Antenna) - Used to connect the dish to the T2 AutoMotion with the supplied single RG6 coax cable.
- C. Not used. For testing purposes only
- D. Power Cord to 115 VAC

Operation

- 2- Turn on the T2 AutoMotion by pressing the power switch located on the front panel.





- 3- Press the Satellite Select Button to select the specific satellite or function.

Note: At the time of printing of this manual, the following are definitions of the use of each particular satellite:

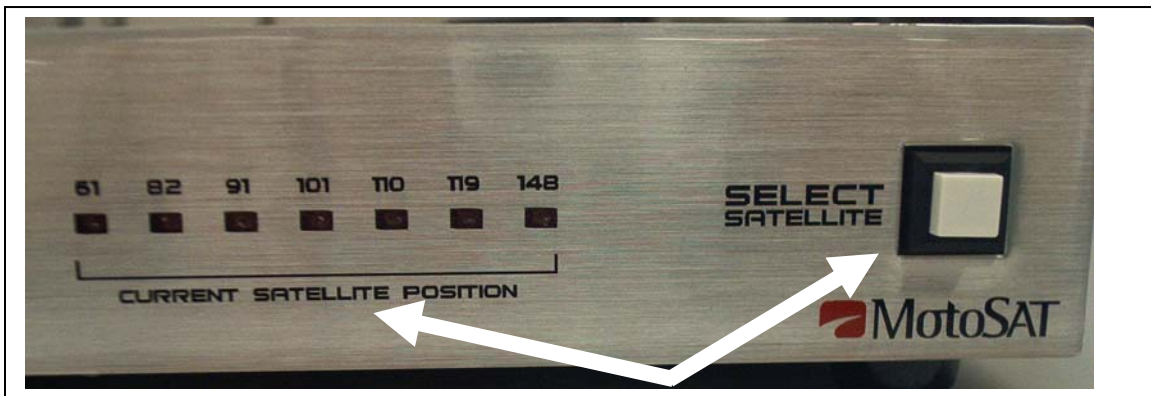
- 61 – Dish Network
- 82 – Bell Express
- 91 – Bell Express
- 101 – DirecTV (*Primary Satellite*)
- 110 – DirecTV / Dish Network
- 119 – DirecTV / Dish Network (*Primary Satellite*)
- 148 – Dish Network

Front Panel Status LEDs:



- **Search** - When lit, this LED indicates the dish is “searching” for a satellite.
- **Tracking** - When lit, this LED indicates the dish has found a satellite and is locked on.
- **Sleep** - Pressing the SELECT button when ON satellite will illuminate the SLEEP status and turn OFF the TRACK status. The dish will not track at this time and is referred to as a HARD SLEEP MODE. Pressing the SELECT button one more time will turn ON the TRACK status (the SLEEP mode will still be illuminated) and this will put the dish in a SOFT SLEEP MODE. The dish will begin to move only when it senses a drop in signal level.

Satellite Selection:



Pressing this button cycles through the satellites listed. Simply highlight the desired satellite and the system automatically searches for that satellite, finds it and peaks for performance.

SIMPLICITY AT ITS FINEST!

**Please direct all operational concerns on this unit
to
MotoSAT Customer Service
T2 Tech Support
1-800-247-7486**

Your Friends at MotoSAT

***MotoSAT
2343 South 2300 West
Salt Lake City, UT 84119
www.motosat.com***

Technical Specifications

INFORMATION	
Size	29" Diameter x 12.5" H
Weight	35 lbs.
Operation	Power, Satellite Selector
Satellite Recognition	DVB Tuner
Satellite Service Setting	via Satellite Selector
Power Supply	12V 4 amp
Maintenance Port	RS-232 [Serial Port]
Antenna	Parabolic Antenna
Type of Stabilization	2-Axis, Stepper Motor
Frequency Band	Ku Band
Elevation Range	19° to 62° (or Selectable)
Operating Frequency	11.7 to 12.7 GHz
Azimuth Range	Unlimited
Acquisition Time (Stationary)	< 40 sec
Acquisition Time (In-Motion)	< 2 minutes
Tracking Rate	> 50° /sec
Temperature Range	-8° F to 131° F
Humidity	95% @ 104° F
Antenna Gain	32 dBi
Minimum E.I.R.P.	50 dBW
Power	90 – 250 VAC @ 30 Watts or Selectable
Antenna Polarization	V/H or LHCP / RHCP
Options	Multiple Satellite Tracking

RAIN FAID ON DOME SYSTEMS

Read all about it.....

Subject: **Rain fade on Domed (Covered) Systems**

What is rain fade? Rain fade is signal degradation due to the interference of rain droplets. Rain can affect performance as well as heavy water content thunder clouds. Satellite frequencies have a great deal to do with degradation. C band satellite frequencies have the best resistance to rain fade, KU band satellite frequencies have the next best performance, and KA band frequencies are the most susceptible to rain fade. Rain fade is also known as *rain attenuation*.

There are quiet a few examples of rain fade or degradation.

1. There is heavy rain (large droplets); it can block the uplink channels for reception.
2. There is heavy rain that can block the receive signal to the satellite.
3. There is also moisture build-up on the dome or cover.

Unfortunately, all these examples are caused by acts of nature, that with a domed system you will always experience all of the symptoms in varying degrees. There are things you can do to reduce degradation.

1. If you live in Seattle, move to Arizona.
2. Get a big fan, point it towards the sky and blow the clouds away.
3. KEEP YOUR DOME CLEAN- Soap and water are the most efficient methods. Some harsh or abrasive cleaners can be harmful to the outside of the dome as well as signal interference. NOTE: Some types of cleaners as well can eventually collect dirt. Be sure to select one that will work for you.
4. After rain, wipe the water droplets off the Dome.
5. A bigger dish size and superior surface accuracy reduces rain fade problems.

All domes on the market are susceptible to rain fade. MotoSAT's Dome (aka Mini Dome) as well as the T2 AutoMotion are the two domed satellite television systems that have the lowest rain degradation on the market. Because of size and surface accuracy of our dish, MotoSAT can offer the best performance in rain fade situations.

Your Staff at MotoSAT